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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/138,429	08/24/1998	IMRAN HASHIM	AMAT/2406/MD	4066
32588	7590	11/25/2005	EXAMINER	
APPLIED MATERIALS, INC. 2881 SCOTT BLVD. M/S 2061 SANTA CLARA, CA 95050			MERCADO, JULIAN A	
			ART UNIT	PAPER NUMBER
			1745	
DATE MAILED: 11/25/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/138,429

Applicant(s)

HASHIM ET AL.

Examiner

Julian Mercado

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-50 and 54-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 31 is/are allowed.
- 6) ☒ Claim(s) 21-30, 32-50 and 54-57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Remarks

This Office action is responsive to applicant's amendment filed September 9, 2005.

Claim Objections

Claim 48 is objected to because of the following informalities:

- a. In claim 48 at line 5, it is suggested to change "hat is" to --that is--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The rejection of claim 31 under 35 U.S.C. 112, second paragraph, has been obviated.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 27 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 27 in line 5 recites "generating at a surface of the substrate" a magnetic field. As line 3 of the claim also recites a surface of the substrate, it is unclear if the second recitation of the "surface of the substrate" is intended to recite (via an antecedent) to the same substrate surface or a different one.

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It appears to the examiner that the claim should instead recite in line 5 --generating at *the* surface of the substrate--. (emphasis added)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 21, 22, 24, 27-29, 32-43, 45, 46, 48-50 and 54-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu (U.S. Pat. 5,589,039) et al. in view of Miyata (U.S. Pat. 5,519,373).

Claims 55 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu et al. in view of Miyata, and further in view of and Tepman (U.S. Pat. 5,527,438).

Claims 23, 25, 26, 30 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu and Miyata, and further in view of Boys et al. (U.S. Pat. 4,500,409).

The above rejection(s) is maintained for the reasons of record. Applicant's arguments filed with the present amendment have been fully considered, however they are not found persuasive for the following reasons.

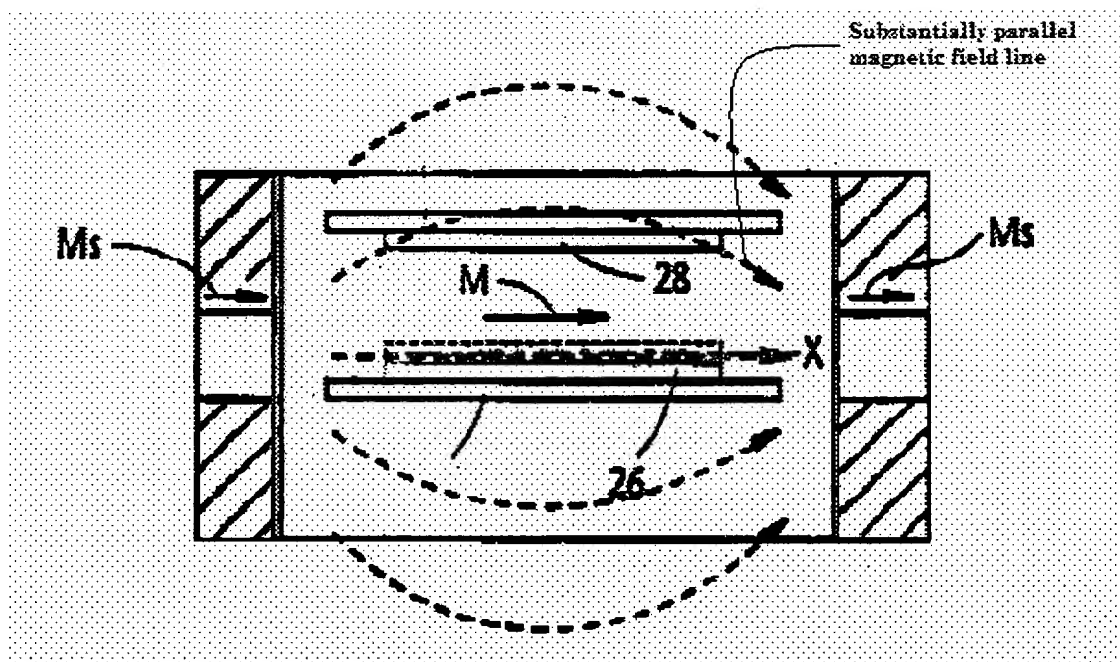
Applicant's present amendment to claims 21, 27, 31, 41 and 48 (which are the independent claims) are noted. Applicant's intent with the present amendment is stated as to require that the specified magnetic field is disposed at the surface of the substrate. In reply, and while the examiner does not object to the present amendment, it is the examiner's position that

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the amended language is superfluous over what is already recited in the claim, e.g. for a magnetic field to “extend along the substrate surface” the magnetic field is implicitly formed along the substrate surface. (see representative claim 21)

Applicant submits that the conclusion set forth in the prior Office action, that the magnetic field in Miyata extends along the substrate, is not supported by Miyata’s disclosure in which the flat magnetic field extends along the target and not along the substrate. In reply, while the examiner concedes that the flat *portion* of the magnetic field in Miyata extends along the target, the claims merely require a substantially parallel magnetic field along the substrate. In this respect, see Figure 15 of Miyata, where the topmost field lines [70] are considered to extend along the substrate surface *substantially* parallel, i.e. while the lines may have some degree of curvature, the lines nonetheless are asserted as substantially parallel to the substrate surface.

See modified Figure below, which is an amalgam of Figure 3 and Figure 15 of Miyata, with [26] representing the target and [28] representing the substrate:



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Applicant's request for suggestions from the examiner that would satisfy applicant's intent is acknowledged. Applicant's intent is clear, though the examiner notes that the scope of the present claims, in reciting a substantially parallel magnetic field line across the substrate surface, allow for an arguably broader reading of the claims which results in these claims being readable by Miyata.

As to the magnetic field lines extending to infinity not clearly understood, please refer to the Office actions sent October 20, 2004 and May 10, 2005.

Arguments against Hsu et al. are noted. As to the magnets disclosed by Hsu not conforming to an annular magnet surrounding a perimeter of the substrate, the examiner asserts that Miyata's magnet remedies this alleged deficiency. Applicant is reminded that the present rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Allowable Subject Matter

Claim 31 is allowed.

The following is an examiner's statement of reasons for allowance: the prior art of record does not teach or suggest the claimed invention regarding a grounded collimator which removes charges from target particles and reduces interference between a target magnetic field and a static magnetic field substantially parallel to the substrate surface.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

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fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian Mercado whose telephone number is (571) 272-1289. The examiner can normally be reached on Monday through Friday.

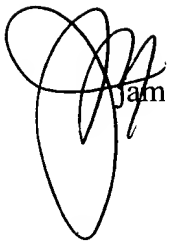
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan, can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

A handwritten signature in black ink, appearing to be "Jam" or similar, with a large loop on the left side.A handwritten signature in black ink, appearing to be "Patrick Joseph Ryan", with a checkmark-like flourish at the end.

PATRICK JOSEPH RYAN
SUPERVISORY PATENT EXAMINER